CHI 2025 | Submission 5584 | Supplemental Materials Guide

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1_Materials

Study 1 Interview Guide

The Interview Guide was developed by first author #1 in the tradition of ethnographic interviewing, and used to guide the sequence of events, presentation of stimuli, tenor of questioning, and communication of obligatory information (i.e. informed consent, compensation) for the Study 1 semi-structured interviews.

Filename: 1_Materials > Study1_Interview_Guide.pdf

Study 1 Stimuli

Stimuli presented to participants in the Study 1 semi-structured interviews were sampled from the MassVis dataset and supplemented by images sourced by first author #1 from online sources including r/dataisbeautiful. Stimuli are illustrated here along with their identification numbers referenced in the manuscript.

Filename: 1_Materials > Study1_Stimuli.pdf

Study 2 Stimuli

Stimuli presented to participants in the Study 2 attribution elicitation survey were sampled from the materials used in Study 1 and supplemented by additional images from the MassVis dataset. Stimuli are illustrated here in both their original and topic-obscured forms for comparison. (Note: Survey respondents only saw topic-obscured stimuli.)

Filename: 1_Materials > Study2_Stimuli.pdf

Study 2 Stimulus Reference

Study 2 stimuli were organized into four relative "embellishment categories" and further into six randomization blocks. The assignment of stimuli to categories and blocks is illustrated here for reference.

Filename: 1_Materials > Study2_Stimulus_Grid.pdf

Conceptual Framework Comparison

To supplement Figure 2 (Conceptual Framework) we offer this additional figure that illustrates the relationship between the coding scheme component of our framework and prior coding schemes provided by Kauer et. al & Hullman et. al

Filename: 1_Materials > Conceptual_Framework_Comparison.pdf

2_Analysis

Study 2 Data Analysis Notebook

Computational Notebook (R markdown format) for reproducing analyses reported in Study 2 results. (.Rmd) file can be executed using an R installation, while the results can be reviewed via the (.html) file in a standard web browser.

Filename: 2_Analysis > VisVibes_5584_supplemental.Rmd Filename: 2_Analysis > VisVibes_5584_supplemental.html

/DATA

PARTICIPANTS

Each row in this file refers to 1 survey respondent, and each column a response variable. This file includes variables automatically calculated by our survey delivery system (Qualtrics) in addition to responses to demographic questions. These data are used to report descriptive statistics of the sample demographics and stimulus block assignments.

Filename: 2_Analysis/data/input > df_participants.csv

GRAPHS

Each row in this file refers to 1 stimulus trial from 1 survey respondent, and each column a response variable. These data are used for most descriptive analysis as well as data modelling of CHART TRUST

Filename: 2_Analysis/data/input > df_graphs.csv

GRAPHS_LONG

The file contains data from df_graphs(above) in *long* format for only the semantic-differential style survey questions. It is used to generate ridgeplot visualizations with all semantic-differential questions for a single stimulus together in one plot.

Filename: 2_Analysis/data/input > df_sd_graphs_long.csv

REFERENCE LABELS

A helper data frame containing labels for the semantic differential scale questions. Used in construction of graphs.

Filename: 2_Analysis/data/reference > ref_labels.rds

REFERENCE STIMULI

A helper data frame with block, category and name identifiers for each stimulus. Used in construction of graphs.

Filename: 2_Analysis/data/reference > ref_stimuli.rds

/FIGS

Directory containing figures generated from computational notebook. To *regenerate* these figures, change the GRAPH_SAVE variable in the .Rmd file to TRUE